

SOIL FERTILITY AND NUTRIENT MANAGEMENT

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Soil Fertility and Nutrient Management Principles and Practices

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NEW INDIA PUBLISHING AGENCY

New Delhi-110 034



NEW INDIA PUBLISHING AGENCY

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ISBN : 978-81-94766-82-7

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SOIL FERTILITY AND NUTRIENT MANAGEMENT

Sustainable agriculture productivity depends on successful maintenance of soil fertility. Among the 16 essential elements required by the plants carbon, hydrogen and oxygen are taken from air and water which account for about 96 per cent of the plant composition while the rest account for about 4 per cent called mineral nutrients. These are absorbed by the plants from soil. They play structural and functional role in the plants, besides there are some elements which play beneficial role in the plants. The mineral elements interact with soil organic matter, clay minerals, soil microorganisms and other associated mineral elements. These interactions determine their availability and dynamics in the soil. Understanding of the dynamics of plant nutrients in the soil will provide scientific basis for efficient nutrient management. Soil organic matter not only provides the nutrients required by the crop but also improve the biological and physical properties of the soil. Attempt has also made to provide information on production and management of organic manures, biofertilizers, integrated nutrient management in cropping systems and nutrient management in problematic soils.

The text will serve as a valuable guide for students and teachers for learning and teaching respectively on soil fertility and nutrient management in crop production.

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ISBN: 978-81-94766-82-7

